

Presented to:

Missouri Department of
Natural Resources

Use Attainability Analysis

City of Moberly

Tributary to Coon Creek

Coon Creek

Sweet Springs Creek

July 8, 2005

Submitted by:

Jacobs Civil Inc.
501 N. Broadway
St. Louis MO 63102



RECEIVED

JUL 11 2005

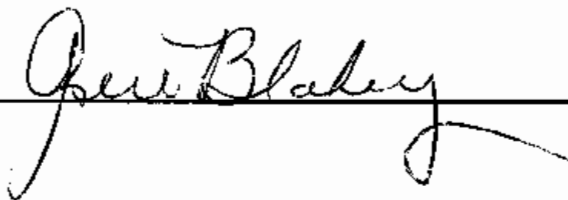
WATER PROTECTION PROGRAM

Field Data Sheets for Recreational Use Stream Surveys**Data Sheet A - Water Body Identification**

Water Body Name: (from USGS 7.5' quad)	Sweet Springs Creek
8-digit HUC:	East Fork Chariton River 10280203
Missouri WBID #:	685
County:	Randolph
Upstream Legal Description:	NW1/4, SEC 11, T53N, R14W
Downstream Legal Description:	NE1/4, SEC 12, T53N, R16W
Upstream Coordinates: (UGS 84, ddd.ddddd)	LAT: 39.4056 LONG: -92.4592
Downstream Coordinates: (UGS 84, ddd.ddddd)	LAT: 39.4139 LONG: -92.6564
Discharger Facility Name(s):	City of Moberly Wastewater Treatment Facility
Discharger Permit Number(s):	MO-0117960
Number of Sites Evaluated:	11 (A-K)
Name of Surveyor and Telephone Number:	Geri Blakey 660-263-7164
Organization:	City of Moberly
Position:	Water Quality Coordinator

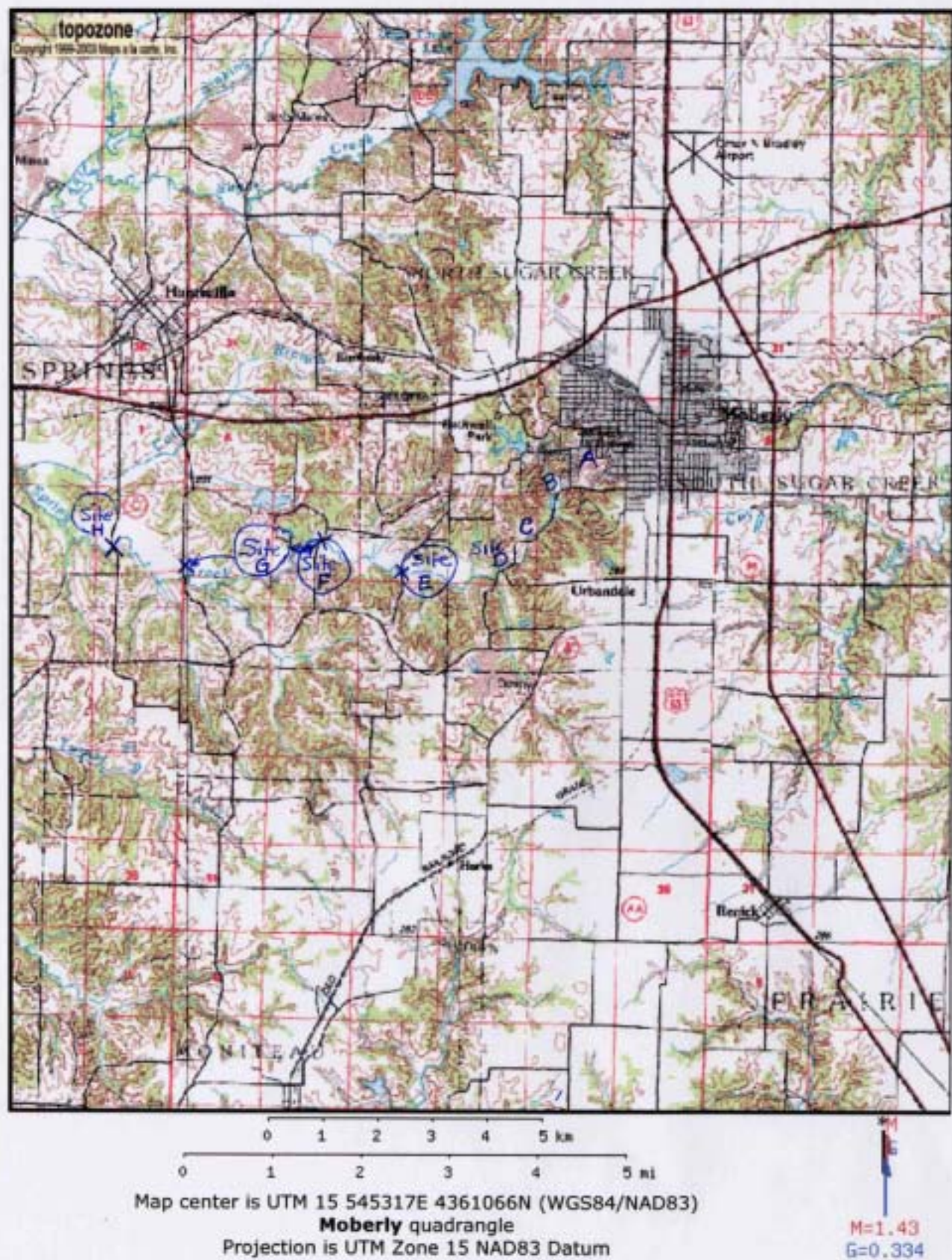
I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: _____



Date: _____

07-08-05





0 1 2 3 4 5 km
0 1 2 3 4 5 mi
Map center is UTM 15 530076E 4361069N (WGS84/NAD83)
Clifton Hill quadrangle
Projection is UTM Zone 15 NAD83 Datum

M=1.572
G=0.222

Site
A

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 685		Site Location Description:	
Site GPS Coordinates: Lat: 39.4056 Long: -92.4592		CR2270(1) upstream of lagoon discharge point outfall #004, #005	
Date & Time: 6/28/05 6:31		Facility Name: City of Moberly Wastewater Treatment Facility	
Personnel: Geri Blakey		Permit Number: MO-0117960	
Current Weather Conditions: overcast, hot		Weather Conditions for Past 7 days: clear/partly cloudy	
Photo Ids: Upstream: #1	Downstream: #3	Other:	

Uses Observed*:

Swimming	Skin diving	SCUBA diving	Tubing	Water skiing
Wind surfing	Kayaking	Boating	Wading	Rafting
Hunting	Trapping	Fishing	<input checked="" type="checkbox"/> None of the above	Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

City/county parks	Playgrounds	MDC conservation lands	Urban areas	Campgrounds
Boating accessses	State parks	National forests	Nature trails	Stairs/walkway
No trespass sign	Fence	<input checked="" type="checkbox"/> Steep slopes	Other:	

Evidence of Human Use*:

Roads	Foot paths/prints	Dock/platform	Livestock Watering	RV / ATV Tracks
Rope swings	Camping Sites	Fire pit/ring	NPDES Discharge	Fishing Tackle
Other: <i>None as per Geri Blakey 7/12/05</i>				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Site
A

Stream Morphology:

Upstream View Physical Dimensions:

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 5	Length (ft): around bend	Avg. Depth (ft): 3 in.	Max. Depth (ft): 5 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

Downstream View Physical Dimensions:

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 7 max.	Length (ft): around bend	Avg. Depth (ft): 5 in.	Max. Depth (ft): 8 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
Flow	Present?	Yes No	Estimated (ft ³ /sec):	

riprap on east side

Substrate*: (These values should add up to 100%.)

% Cobble	% Gravel	% Sand	% Silt	100 % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

Water Characteristics*: (Mark all that apply.)

Odor:	Sewage	Musky	Chemical	x None	Other:
Color:	x Clear	Green	Gray	Milky	x Other: muddy
Bottom Deposit:	Sludge	Solids	Fine sediments	x None	Other:
Surface Deposit:	Oil	Scum	Foam	x None	Other:

Comments: Please attach additional comments (including information from interviews) to this form.

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: John Blaney Date: 07-08-05
 Organization: City of Moberly Position: Water Quality Coordinator



A – upstream #1



A – downstream #3

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 685		Site Location Description: CR2270(2) downstream of outfall #004, #005 culvert under road	
Site GPS Coordinates: Lat: 39.4012 Long: -92.4645		Facility Name: City of Moberly Wastewater Treatment Facility	
Date & Time: 6/28/05 6:50		Permit Number: MO-0117960	
Personnel: Geri Blakey		Weather Conditions for Past 7 days: clear/partly cloudy	
Current Weather Conditions: overcast, hot			
Photo Ids: Upstream: #6, #7	Downstream: #8, #9	Other:	

Uses Observed*:

Swimming	Skin diving	SCUBA diving	Tubing	Water skiing
Wind surfing	Kayaking	Boating	Wading	Rafting
Hunting	Trapping	Fishing	X None of the above	Other:
Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)				

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

City/county parks	Playgrounds	MDC conservation lands	Urban areas	Campgrounds
Boating accesses	State parks	National forests	Nature trails	Stairs/walkway
No trespass sign	Fence	X Steep slopes	Other:	

Evidence of Human Use*:

Roads	Foot paths/prints	Dock/platform	Livestock Watering	RV / ATV Tracks
Rope swings	Camping Sites	Fire pit/ring	NPDES Discharge	Fishing Tackle
Other: None. Sm as per Geri Blakey 7/12/05				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Site
B**Stream Morphology:****Upstream View Physical Dimensions:**

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 6 max.	Length (ft): around bend	Avg. Depth (ft): 2 in.	Max. Depth (ft): 4 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

Downstream View Physical Dimensions:

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 2	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 6 in.
x Pool	Width (ft): 15	Length (ft): 30	Avg. Depth (ft): 6 in.	Max. Depth (ft): 9 in.
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

riprap on east side

Substrate*: (These values should add up to 100%.)

% Cobble	10 % Gravel	% Sand	% Silt	90 % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

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Water Characteristics*: (Mark all that apply.)

Odor:	Sewage	Musky	Chemical	x None	Other:
Color:	x Clear	Green	Gray	Milky	x Other: muddy
Bottom Deposit:	Sludge	Solids	Fine sediments	x None	Other:
Surface Deposit:	Oil	Scum	Foam	x None	Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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Signed: G. W. Blaney Date: 07-08-05Organization: City of Moberly Position: Water Quality Coordinator



B – upstream #6



B – upstream #7



B – downstream #8



B – downstream #9

Site
C

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 685		Site Location Description: CR2270(3) downstream of outfall #004, #005 culvert under road	
Site GPS Coordinates: Lat: 39.3975 Long: -92.4672			
Date & Time: 6/28/05 7:05		Facility Name: City of Moberly Wastewater Treatment Facility	
Personnel: Geri Blakey		Permit Number: MO-0117960	
Current Weather Conditions: overcast, hot		Weather Conditions for Past 7 days: clear/partly cloudy	
Photo Ids: Upstream: #10, #11	Downstream: #12, #13	Other:	

Uses Observed*:

Swimming	Skin diving	SCUBA diving	Tubing	Water skiing
Wind surfing	Kayaking	Boating	Wading	Rafting
Hunting	Trapping	Fishing	X None of the above	Other:
Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)				

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

City/county parks	Playgrounds	MDC conservation lands	Urban areas	Campgrounds
Boating accesses	State parks	National forests	Nature trails	Stairs/walkway
No trespass sign	Fence	X Steep slopes	Other:	

Evidence of Human Use*:

Roads	Foot paths/prints	Dock/platform	Livestock Watering	RV / ATV Tracks
Rope swings	Camping Sites	Fire pit/ring	NPDES Discharge	Fishing Tackle
Other: None. gm as per Geri Blakey 7/12/05				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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Site
C**Stream Morphology:****Upstream View Physical Dimensions:**

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft):	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 8 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

Downstream View Physical Dimensions:

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 1.5	Length (ft): around bend	Avg. Depth (ft): 3 in.	Max. Depth (ft): 5 in.
x Pool	Width (ft): 20	Length (ft): 18	Avg. Depth (ft): 8 in.	Max. Depth (ft): 1
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

riprap on east side

Substrate*: (These values should add up to 100%.)

% Cobble	20 % Gravel	% Sand	% Silt	80 % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

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Water Characteristics*: (Mark all that apply.)

Odor:	Sewage	Musky	Chemical	x None	Other:
Color:	x Clear	Green	Gray	Milky	x Other: muddy
Bottom Deposit:	Sludge	Solids	Fine sediments	x None	Other:
Surface Deposit:	Oil	Scum	Foam	x None	Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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Signed: John Blahney Date: 07-08-05Organization: City of Moberly Position: Water Quality Coordinator



C – downstream #12



C – downstream #13



C – upstream #10



C – upstream #11

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 685		Site Location Description:	
Site GPS Coordinates: Lat: 39.3978 Long: -92.4687		CR2270(4) downstream of outfall #004, #005 culvert under road	
Date & Time: 6/28/05 7:20		Facility Name: City of Moberly Wastewater Treatment Facility	
Personnel: Geri Blakey		Permit Number: MO-0117960	
Current Weather Conditions: overcast, hot		Weather Conditions for Past 7 days: clear/partly cloudy	
Photo Ids: Upstream: #17	Downstream: #16	Other:	

Uses Observed*:

Swimming	Skin diving	SCUBA diving	Tubing	Water skiing
Wind surfing	Kayaking	Boating	Wading	Rafting
Hunting	Trapping	Fishing	X None of the above	Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

City/county parks	Playgrounds	MDC conservation lands	Urban areas	Campgrounds
Boating accesses	State parks	National forests	Nature trails	Stairs/walkway
No trespass sign	Fence	X Steep slopes	Other:	

Evidence of Human Use*:

Roads	Foot paths/prints	Dock/platform	Livestock Watering	RV / ATV Tracks
Rope swings	Camping Sites	Fire pit/ring	NPDES Discharge	Fishing Tackle
Other: None. <i>DM as per Geri Blakey 7/12/05</i>				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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Site
D**Stream Morphology:****Upstream View Physical Dimensions:**

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 1.5	Length (ft): around bend	Avg. Depth (ft): 2 in.	Max. Depth (ft): 4 in.
x Pool	Width (ft): 6	Length (ft): 11	Avg. Depth (ft): 4 in.	Max. Depth (ft): 6 in.
x Flow	Present?	Yes x No	Estimated (ft ³ /sec):	

concrete used as riprap old plastic pool and bike frame dumped

Downstream View Physical Dimensions:

x Pool	Width (ft): 1.5	Length (ft): 6	Avg. Depth (ft): 2 in.	Max. Depth (ft): 3 in.
Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Pool	Width (ft): 5 max.	Length (ft): 25	Avg. Depth (ft): 3 in.	Max. Depth (ft): 5 in.
x Flow	Present?	Yes x No	Estimated (ft ³ /sec): very slow	

dry area between pools, then dry again

Substrate*: (These values should add up to 100%.)

% Cobble	5	% Gravel	% Sand	% Silt	95	% Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

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Water Characteristics*: (Mark all that apply.)

Odor:	Sewage	Musky	Chemical	x None	Other:
Color:	x Clear	Green	Gray	Milky	x Other: muddy
Bottom Deposit:	Sludge	Solids	Fine sediments	x None	Other:
Surface Deposit:	Oil	Scum	Foam	x None	Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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Signed: Jim Blakely Date: 07-08-05Organization: City of Moberly Position: Water Quality Coordinator



D – downstream #16



D – upstream #17

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 685		Site Location Description: CR2250 bridge crossing downstream of outfall #004, #005	
Site GPS Coordinates: Lat: 39.3961 Long: -92.4916			
Date & Time: 6/28/05 7:28		Facility Name: City of Moberly Wastewater Treatment Facility	
Personnel: Geri Blakey		Permit Number: MO-0117960	
Current Weather Conditions: hazy, hot		Weather Conditions for Past 7 days: clear/partly cloudy	
Photo Ids: Upstream: #19	Downstream: #20, #21	Other:	

Uses Observed*:

Swimming	Skin diving	SCUBA diving	Tubing	Water skiing
Wind surfing	Kayaking	Boating	Wading	Rafting
Hunting	Trapping	Fishing	<input checked="" type="checkbox"/> None of the above	Other:
Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)				

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

City/county parks	Playgrounds	MDC conservation lands	Urban areas	Campgrounds
Boating accesses	State parks	National forests	Nature trails	Stairs/walkway
No trespass sign	<input checked="" type="checkbox"/> Fence	<input checked="" type="checkbox"/> Steep slopes	Other:	

Fence across upstream side of bridge; corn planted on each side of creek

Evidence of Human Use*:

Roads	Foot paths/prints	Dock/platform	Livestock Watering	RV / ATV Tracks
Rope swings	Camping Sites	Fire pit/ring	NPDES Discharge	Fishing Tackle
<input checked="" type="checkbox"/> Other: trash dumped				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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Site
E

Stream Morphology:
Upstream View Physical Dimensions:

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 10	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 10 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

Downstream View Physical Dimensions:

x Riffle	Width (ft): 5	Length (ft): 3	Avg. Depth (ft): 1 in.	Max. Depth (ft): 3 in.
x Run	Width (ft): 5	Length (ft): around bend	Avg. Depth (ft): 3 in.	Max. Depth (ft): 6 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
Flow	Present?	Yes No	Estimated (ft ³ /sec):	

Substrate*: (These values should add up to 100%.)

% Cobble	20 % Gravel	% Sand	% Silt	80 % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

Water Characteristics*: (Mark all that apply.)

Odor:	Sewage	Musky	Chemical	x None	Other:
Color:	x Clear	Green	Gray	Milky	Other:
Bottom Deposit:	Sludge	Solids	Fine sediments	x None	Other:
Surface Deposit:	Oil	Scum	Foam	x None	Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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Signed: Jeff Blaney Date: 07-08-05
 Organization: City of Moberly Position: Water Quality Coordinator



E – upstream #19



E – downstream #20



E – downstream #21

Field Data Sheets for Recreational Use Stream Surveys**Data Sheet B - Site Characterization**

(A separate data sheet must be completed for each site)

Missouri WBID #: 685		Site Location Description:	
Site GPS Coordinates: Lat: 39.4009 Long: -92.5076		CR2220 bridge crossing downstream of outfall #004, #006	
Date & Time: 6/28/05 6:55		Facility Name: City of Moberly Wastewater Treatment Facility	
Personnel: Geri Blakey		Permit Number: MO-0117960	
Current Weather Conditions: hazy, hot		Weather Conditions for Past 7 days: clear/partly cloudy	
Photo Ids: Upstream: #22, #23	Downstream: #24	Other:	

Uses Observed*:

Swimming	Skin diving	SCUBA diving	Tubing	Water skiing
Wind surfing	Kayaking	Boating	Wading	Rafting
Hunting	Trapping	Fishing	X None of the above	Other:
Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)				

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

City/county parks	Playgrounds	MDC conservation lands	Urban areas	Campgrounds
Boating accesses	State parks	National forests	Nature trails	Stairs/walkway
No trespass sign	Fence	X Steep slopes	Other:	

Fence across upstream side of bridge; corn planted on each side of creek

Evidence of Human Use*:

Roads	Foot paths/prints	Dock/platform	Livestock Watering	RV / ATV Tracks
Rope swings	Camping Sites	Fire pit/ring	NPDES Discharge	Fishing Tackle
X Other: considerable amount of trash dumped on the downstream side of the bridge				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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Site
F**Stream Morphology:****Upstream View Physical Dimensions:**

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 10 max.	Length (ft): around bend	Avg. Depth (ft): 6 in.	Max. Depth (ft): 10 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present? x Yes No	Estimated (ft ³ /sec): very slow		

water slows to a trickle under the bridge

Downstream View Physical Dimensions:

x Riffle	Width (ft): 1	Length (ft): 6 in.	Avg. Depth (ft): 1 inch	Max. Depth (ft): 2 in.
x Run	Width (ft): 4	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 8 in.
x Pool	Width (ft): 6	Length (ft): 6	Avg. Depth (ft): 5 in.	Max. Depth (ft): 8 in.
x Flow	Present? x Yes No	Estimated (ft ³ /sec): very slow		

Run #2 3 6 3 in. 5 in.

Substrate*: (These values should add up to 100%.)

% Cobble	25 % Gravel	% Sand	% Silt	75 % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

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Water Characteristics*: (Mark all that apply.)

Odor:	Sewage	Musky	Chemical	x None	Other:
Color:	x Clear	Green	Gray	Milky	x Other: muddy
Bottom Deposit:	Sludge	Solids	Fine sediments	x None	Other:
Surface Deposit:	Oil	Scum	Foam	x None	Other:

Comments: Please attach additional comments (including information from interviews) to this form.

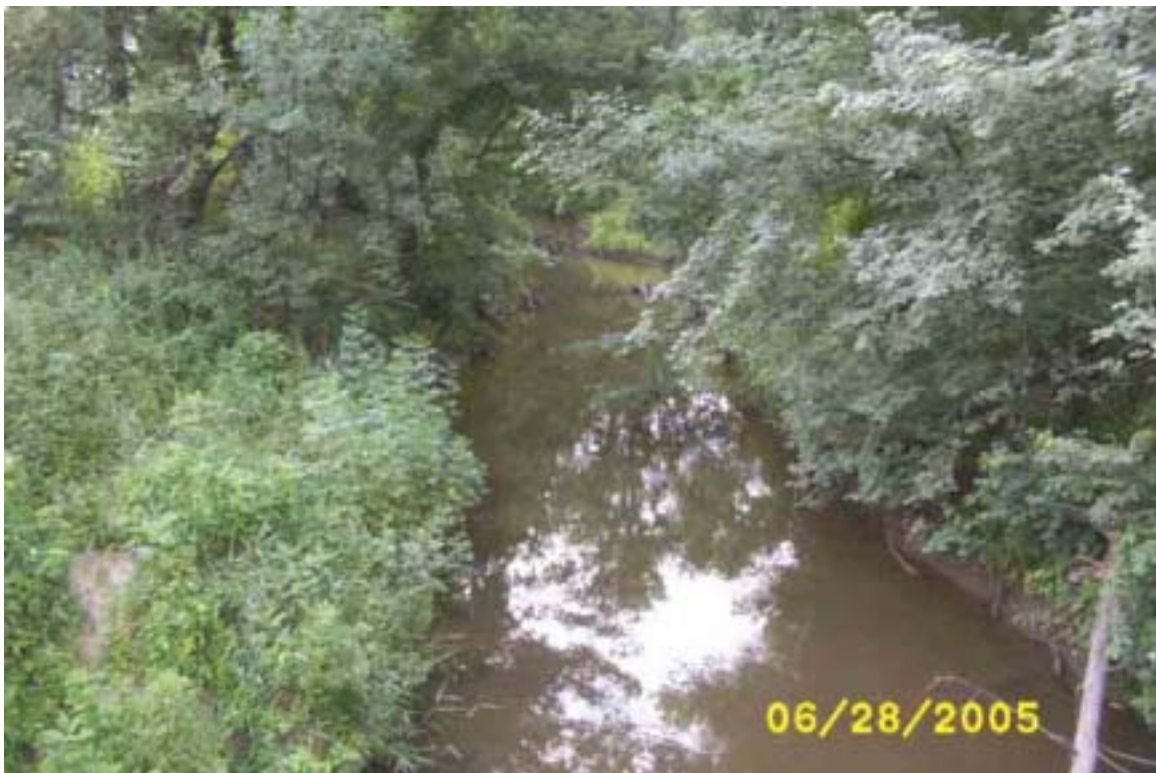
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Signed: Gene Blaney Date: 07-08-05
 Organization: City of Moberly Position: Water Quality Coordinator



F – upstream #22



F – upstream #23



F – downstream #24

site
G

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 685		Site Location Description:	
Site GPS Coordinates: Lat: 39.3945 Long: -92.5368		CR2210 bridge crossing downstream of outfall #004, #005	
Date & Time: 6/26/05 6:36		Facility Name: City of Moberly Wastewater Treatment Facility	
Personnel: Geri Blakey		Permit Number: MO-0117960	
Current Weather Conditions: hazy, hot		Weather Conditions for Past 7 days: clear/partly cloudy	
Photo Ids: Upstream: #24	Downstream: #25, #26	Other:	

Uses Observed*:

Swimming	Skin diving	SCUBA diving	Tubing	Water skiing
Wind surfing	Kayaking	Boating	Wading	Rafting
Hunting	Trapping	Fishing	X None of the above	Other:
Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)				

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

City/county parks	Playgrounds	MDC conservation lands	Urban areas	Campgrounds
Boating accesses	State parks	National forests	Nature trails	Stairs/walkway
No trespass sign	Fence	X Steep slopes	Other:	

Fence across upstream side of bridge; corn planted on each side of creek

Evidence of Human Use*:

Roads	Foot paths/prints	Dock/platform	Livestock Watering	RV / ATV Tracks
Rope swings	Camping Sites	Fire pit/ring	NPDES Discharge	Fishing Tackle
X Other: a/c unit dumped on downstream side of bridge; hunk of concrete; other debris				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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Site
6**Stream Morphology:****Upstream View Physical Dimensions:**

x Riffle	Width (ft): 3	Length (ft): 4	Avg. Depth (ft): 1 in.	Max. Depth (ft): 2 in.
x Run	Width (ft): 10 max.	Length (ft): around bend	Avg. Depth (ft): 8 in.	Max. Depth (ft): 1
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

water slows to a trickle under the bridge

Downstream View Physical Dimensions:

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 8 max.	Length (ft): around bend	Avg. Depth (ft): 6 in.	Max. Depth (ft): 10 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

Substrate*: (These values should add up to 100%.)

% Cobble	25 % Gravel	% Sand	% Silt	75 % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

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Water Characteristics*: (Mark all that apply.)

Odor:	Sewage	Musky	Chemical	x None	Other:
Color:	x Clear	Green	Gray	Milky	x Other: muddy
Bottom Deposit:	Sludge	Solids	Fine sediments	x None	Other:
Surface Deposit:	Oil	Scum	Foam	x None	Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

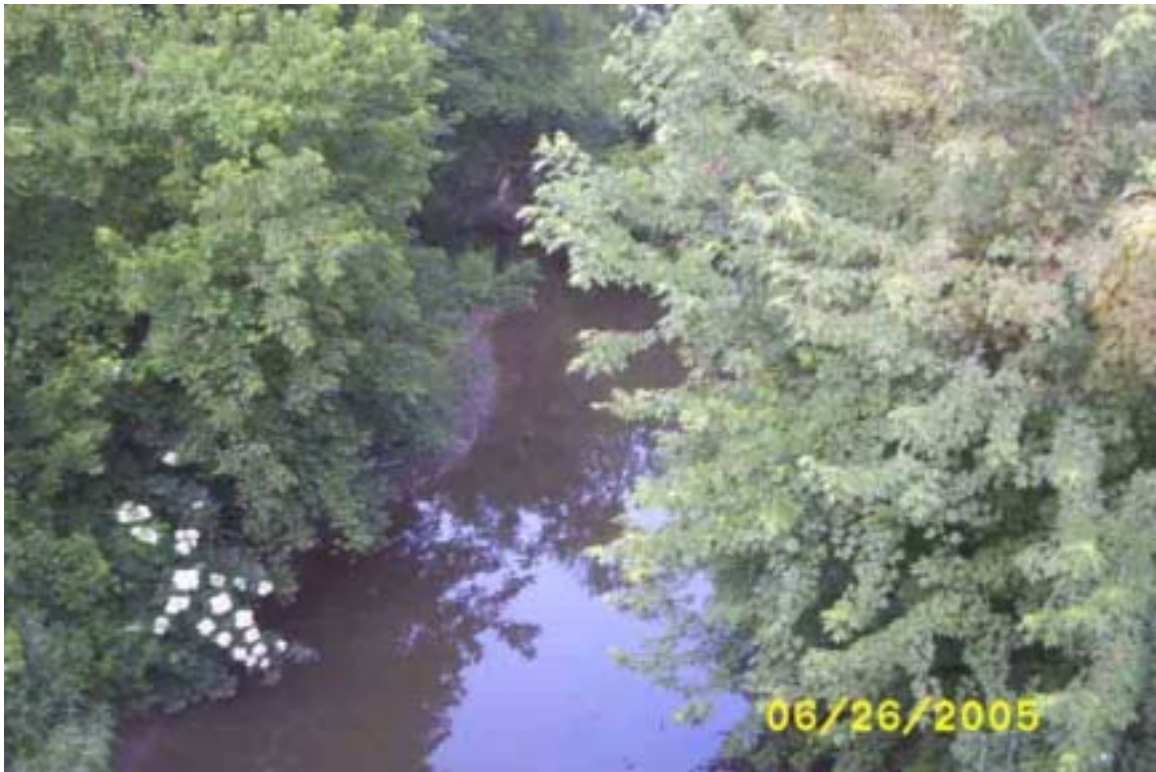
Signed: Gene Blakely Date: 07-08-05Organization: City of Moberly Position: Water Quality Coordinator



G – upstream #24



G – downstream #25



G – downstream #26

Site
H**Field Data Sheets for Recreational Use Stream Surveys****Data Sheet B - Site Characterization**

(A separate data sheet must be completed for each site)

Missouri WBID #: 685		Site Location Description:	
Site GPS Coordinates: Lat: 39.3945 Long: -92.5368		SR D bridge crossing downstream of outfall #004, #005	
Date & Time: 6/25/05 9:30		Facility Name: City of Moberly Wastewater Treatment Facility	
Personnel: Geri Blakey		Permit Number: MO-0117960	
Current Weather Conditions: clear, hot, humid		Weather Conditions for Past 7 days: clear/partly cloudy	
Photo Ids: Upstream: #20	Downstream: #18	Other:	

Uses Observed*:

Swimming	Skin diving	SCUBA diving	Tubing	Water skiing
Wind surfing	Kayaking	Boating	Wading	Rafting
Hunting	Trapping	Fishing	x None of the above	Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

farm crops on north side of creek, both upstream and downstream

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

City/county parks	Playgrounds	MDC conservation lands	Urban areas	Campgrounds
Boating accesses	State parks	National forests	Nature trails	Stairs/walkway
No trespass sign	Fence	X Steep slopes	Other:	

Small area of riprap on north side of downstream

Evidence of Human Use*:

Roads	Foot paths/prints	Dock/platform	Livestock Watering	RV / ATV Tracks
Rope swings	Camping Sites	Fire pit/ring	NPDES Discharge	Fishing Tackle
Other: None, as per Geri Blakey 7/12/05				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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Site
H**Stream Morphology:****Upstream View Physical Dimensions:**

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 10 max.	Length (ft): around bend	Avg. Depth (ft): 5 in.	Max. Depth (ft): 8 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

water slows to a trickle under the bridge

Downstream View Physical Dimensions:

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 8 max.	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 8 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

Substrate*: (These values should add up to 100%.)

% Cobble	30	% Gravel	% Sand	% Silt	70	% Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

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Water Characteristics*: (Mark all that apply.)

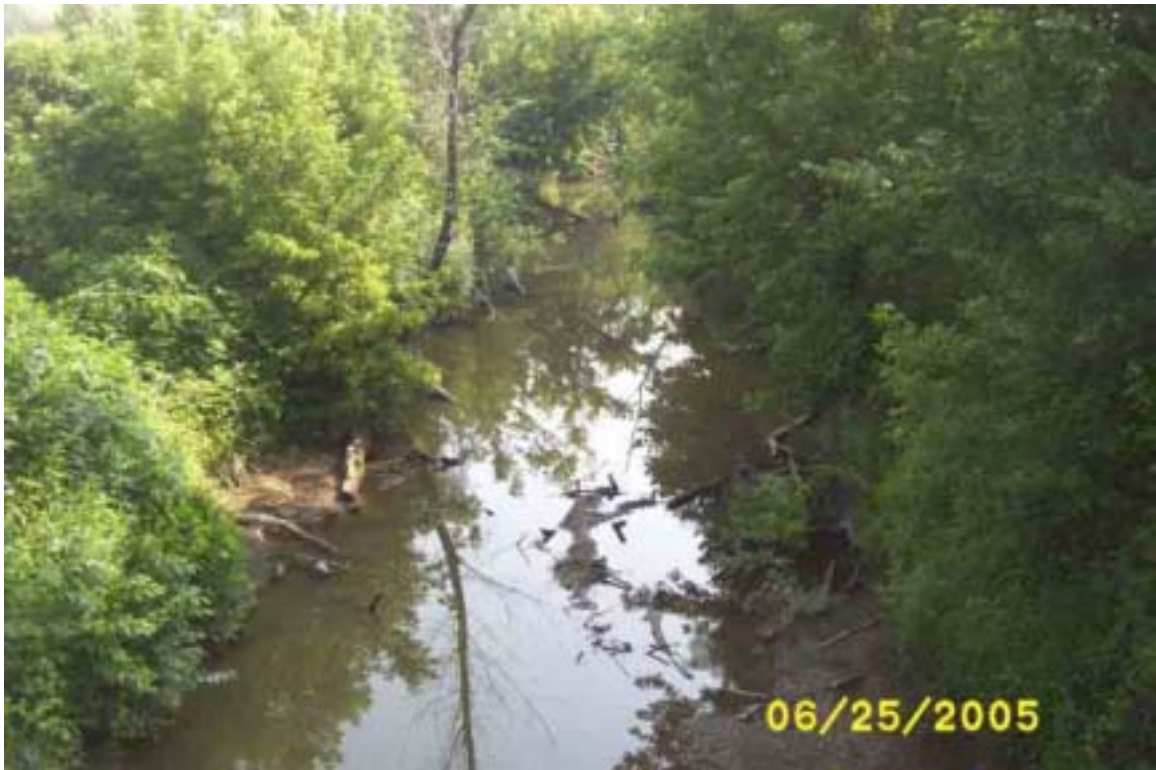
Odor:	Sewage	Musky	Chemical	x None	Other:
Color:	Clear	x Green	Gray	Milky	Other:
Bottom Deposit:	Sludge	Solids	Fine sediments	x None	Other:
Surface Deposit:	Oil	Scum	Foam	x None	Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Jim Blakey Date: 07-08-05
 Organization: City of Moberly Position: Water Quality Coordinator



H – downstream #18



H – upstream #20

Site
1**Field Data Sheets for Recreational Use Stream Surveys****Data Sheet B - Site Characterization**

(A separate data sheet must be completed for each site)

Missouri WBID #: 685		Site Location Description:	
Site GPS Coordinates: Lat: 39.4105 Long: -92.577		CR2130 (2) bridge crossing downstream of outfall #004, #005	
Date & Time: 6/25/05 9:00		Facility Name: City of Moberly Wastewater Treatment Facility	
Personnel: Geri Blakey		Permit Number: MO-0117960	
Current Weather Conditions: clear, hot, humid		Weather Conditions for Past 7 days: clear/partly cloudy	
Photo Ids: Upstream: #12	Downstream: #14	Other:	

Uses Observed*:

Swimming	Skin diving	SCUBA diving	Tubing	Water skiing
Wind surfing	Kayaking	Boating	Wading	Rafting
Hunting	Trapping	Fishing	x None of the above	Other:
Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)				

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

City/county parks	Playgrounds	MDC conservation lands	Urban areas	Campgrounds
Boating accesses	State parks	National forests	Nature trails	Stairs/walkway
No trespass sign	x Fence	Steep slopes	Other:	

riprap on bank; (fence is on northwest side)

Evidence of Human Use*:

Roads	Foot paths/prints	Dock/platform	Livestock Watering	RV / ATV Tracks
Rope swings	Camping Sites	Fire pit/ring	NPDES Discharge	Fishing Tackle
Other: None. as per Geri Blakey 7/12/05				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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Site
I**Stream Morphology:****Upstream View Physical Dimensions:**

Rifle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 15 max.	Length (ft): around bend	Avg. Depth (ft): 10 in.	Max. Depth (ft): 1.3
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

water slows to a trickle under the bridge

Downstream View Physical Dimensions:

x Rifle	Width (ft): 4	Length (ft): 30	Avg. Depth (ft): 2 in.	Max. Depth (ft): 4 in.
x Run	Width (ft): 10 max.	Length (ft): around bend	Avg. Depth (ft): 8 in.	Max. Depth (ft): 1
x Pool	Width (ft): 25	Length (ft): 35	Avg. Depth (ft): 10 in.	Max. Depth (ft): 15 in.
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

Substrate*: (These values should add up to 100%.)

% Cobble	25 % Gravel	% Sand	% Silt	75 % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

algae on rocks under bridge (riffle)

Water Characteristics*: (Mark all that apply.)

Odor:	Sewage	Musky	Chemical	x None	Other:
Color:	Clear	x Green	Gray	Milky	Other:
Bottom Deposit:	Sludge	Solids	Fine sediments	x None	Other:
Surface Deposit:	Oil	Scum	Foam	x None	Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Julie Blaker Date: 07-08-05Organization: City of Moberly Position: Water Quality Coordinator



I upstream #12



I – downstream #14

Field Data Sheets for Recreational Use Stream Surveys**Data Sheet B - Site Characterization**

(A separate data sheet must be completed for each site)

Missouri WBID #: 685		Site Location Description:	
Site GPS Coordinates: Lat: 39.4017 Long: -92.5963		CR2130 (1) bridge crossing downstream of outfall #004, #005	
Date & Time: 6/25/05 8:30		Facility Name: City of Moberly Wastewater Treatment Facility	
Personnel: Geri Blakey		Permit Number: MO-0117960	
Current Weather Conditions: clear, hot		Weather Conditions for Past 7 days: clear/partly cloudy	
Photo Ids: Upstream: #7, #8	Downstream: #9	Other:	

Uses Observed*:

Swimming	Skin diving	SCUBA diving	Tubing	Water skiing
Wind surfing	Kayaking	Boating	Wading	Rafting
Hunting	Trapping	Fishing	<input checked="" type="checkbox"/> None of the above	Other:
Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)				

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

City/county parks	Playgrounds	MDC conservation lands	Urban areas	Campgrounds
Boating accesses	State parks	National forests	Nature trails	Stairs/walkway
<input checked="" type="checkbox"/> No trespass sign	Fence	Steep slopes	Other:	

Evidence of Human Use*:

<input checked="" type="checkbox"/> Roads	Foot paths/prints	Dock/platform	Livestock Watering	RV / ATV Tracks
Rope swings	Camping Sites	Fire pit/ring	NPDES Discharge	Fishing Tackle
Other: road used to access field along side of creek (see photo #1)				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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Site
J

Stream Morphology:
Upstream View Physical Dimensions:

2 Riffle	Width (ft): 4/3	Length (ft): 1.5/2	Avg. Depth (ft): 1 in./1 in.	Max. Depth (ft): 2 in./2 in.
x Run	Width (ft): 8 max.	Length (ft): around bend	Avg. Depth (ft): 6 in.	Max. Depth (ft): 1
x Pool	Width (ft): 6	Length (ft): 12	Avg. Depth (ft): 4 in.	Max. Depth (ft): 10 in.
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

Downstream View Physical Dimensions:

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 25 max.	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 1
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

Substrate*: (These values should add up to 100%.)

% Cobble	15 % Gravel	15 % Sand	% Silt	70 % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

algae on rocks under bridge (riffle)

Water Characteristics*: (Mark all that apply.)

Odor:	Sewage	Musky	Chemical	x None	Other:
Color:	x Clear	Green	Gray	Milky	x Other: murky
Bottom Deposit:	Sludge	Solids	Fine sediments	x None	Other:
Surface Deposit:	Oil	Scum	Foam	x None	Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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Signed: Gene Blakely Date: 07-08-05

Organization: City of Moberly Position: Water Quality Coordinator



J – upstream #7



J – upstream #8



J – downstream #9

Site
K

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 685		Site Location Description:	
Site GPS Coordinates: Lat: 39.3923 Long: -92.6139		State Hwy 3 bridge crossing downstream of outfall #004, #005	
Date & Time: 6/25/05 6:55		Facility Name: City of Moberly Wastewater Treatment Facility	
Personnel: Geri Blakey		Permit Number: MO-0117960	
Current Weather Conditions: clear, hot		Weather Conditions for Past 7 days: clear/partly cloudy	
Photo Ids: Upstream: #2, #3	Downstream: #4, #5	Other:	

Uses Observed*:

Swimming	Skin diving	SCUBA diving	Tubing	Water skiing
Wind surfing	Kayaking	Boating	Wading	Rafting
Hunting	Trapping	Fishing	<input checked="" type="checkbox"/> None of the above	Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

City/county parks	Playgrounds	MDC conservation lands	Urban areas	Campgrounds
Boating accesses	State parks	National forests	Nature trails	Stairs/walkway
No trespass sign	Fence	<input checked="" type="checkbox"/> Steep slopes	Other:	

Evidence of Human Use*:

Roads	Foot paths/prints	Dock/platform	Livestock Watering	RV / ATV Tracks
Rope swings	Camping Sites	Fire pit/ring	NPDES Discharge	Fishing Tackle

☒ Other: old tire dumped

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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Site
K

Stream Morphology:

Upstream View Physical Dimensions:

2 Riffle	Width (ft): 3/3	Length (ft): 6/20	Avg. Depth (ft): 2 in./3 in.	Max. Depth (ft): 3 in./5 in.
x Run	Width (ft): 10 max.	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 10 in.
x Pool	Width (ft): 25	Length (ft): 20	Avg. Depth (ft): 1	Max. Depth (ft): 1.3
x Flow	Present?	x Yes No	Estimated (ft ³ /sec): very slow	

Downstream View Physical Dimensions:

Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
x Run	Width (ft): 12 max.	Length (ft): around bend	Avg. Depth (ft): 4 in.	Max. Depth (ft): 8 in.
Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
Flow	Present?	Yes No	Estimated (ft ³ /sec):	

Substrate*: (These values should add up to 100%.)

25 % Cobble	30 % Gravel	25 % Sand	% Silt	20 % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

Water Characteristics*: (Mark all that apply.)

Odor:	Sewage	Musky	Chemical	x None	Other:
Color:	x Clear	Green	Gray	Milky	Other:
Bottom Deposit:	Sludge	Solids	Fine sediments	x None	Other:
Surface Deposit:	Oil	Scum	Foam	x None	Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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Signed:  Date: 07-08-05

Organization: City of Moberly Position: Water Quality Coordinator



K – downstream #4



K – downstream #5



K - upstream #2



K - upstream #3